

REMARKS

Applicants' respectfully request reexamination and reconsideration of the application in view of the following remarks.

Claims 1-4 have been amended, and new claims 5-51 have been added to the application.

Applicant's counsel appreciates having the opportunity to meet with the Examiner in an Interview on the 4<sup>th</sup> of February 2003, to discuss the claims with respect to the cited prior art references, and the Examiner's helpful comments.

The Examiner has objected to the drawings as being informal.

Applicant respectfully requests that the Examiner withdraw the objection in view of Applicant's submission of formal drawings enclosed herewith. No new matter has been added to the drawings.

The Examiner has rejected claims 2-4 under 35 USC §102(b) as being anticipated by Glaesener (U.S. Patent 3,704,861) in that Glaesener discloses a block having a thermoplastic and rubber composition.

Applicant respectfully traverses the rejection and requests that the Examiner withdraw the rejection in view of the following remarks.

Glaesener teaches bonding an elastomeric substance such as closed cell polyurethane or other foam into a metal shell. Applicant has amended claims 2-4 to depend from claim 1 which as amended, incorporates elements such as a top tab for holding the

spacer block to a post, side tab's for positioning the spacer block on a post and a bottom tab for supporting the bottom edge of a guard rail. These features are not taught by Glaesener alone or in combination with the other references.

The Examiner has rejected claims 1 and 2 under 35 USC §103(a) as being unpatentable over Marinelli (U.S. Patent 6,007,269) in view of Ackerman (U.S. Patent 3,493,213) in that Marinelli teaches a polymer spacer block having means for supporting a guard rail and Ackerman teaches a top positioning tab.

Applicant respectfully traverses the rejection and requests that the Examiner withdraw the rejection in view of the following remarks.

The Marinella reference teaches that a spacer block may be formed in size and shape to fit a particular guard rail having a "W" shaped cross-sectional pattern or the like. Applicant asserts that the cited art may be applicable to units sized and shaped for cooperative engagement; however, Applicant's claimed invention, as now claimed in claim 1 utilizes a resting mechanism operably coupled proximate said bottom panel defining a tab projecting past the front face to support a bottom edge of a guard rail which can be selected from a variety of sizes or shapes as opposed to the unit taught in the prior art. Although Ackerman teaches a spacer block showing a top positioning tab, the references still do not teach Applicant's novel invention as claimed utilizing the feature of a resting mechanism to hold the bottom edge of a guard rail providing a method of holding all types of guard rails.

The Examiner has also listed several patents made of record and not relied upon which is considered pertinent to Applicant's disclosure. Applicant has reviewed the references and agrees with the Examiner that while pertinent, the references are no more

relevant than the cited references.

Also enclosed is a Supplemental Information Disclosure Statement together with a copy of an article from the Society of Plastic Engineers entitled 'Structural Foam' which is not submitted because it is considered prior art, but because it provides general information regarding structural foam. Since Applicant's spacer block is the first to incorporate structural foam technology, the article should be of interest to those seeking to utilize the structural foam technology. Please note that Figure 1 on page 2 of the article is identical to Figure 11 in the instant application has referenced in the specification in order to differentiate Applicant's novel product from foam filled products of conventional spacer blocks.

Attached is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned '**Version with Markings to Show Changes Made.**'

For all of the foregoing reasons, Applicant submits that the claims are patentable over the cited references and that the application is in condition for allowance. Accordingly, Applicant respectfully requests prompt reconsideration and receipt of the formal Notice of Allowance. A check for the petition fees and fee for addition claims in excess of twenty is enclosed herewith. Please charge any underpayment or credit any overpayment to Counsel's Deposit Account No. 50-0642.

If the Examiner believes there are other unresolved issues in this case, Applicant's attorney would appreciate a telephone call at (502) 452-1233 to discuss any such remaining issues.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "David W. Carrithers", is written over a horizontal line.

David W. Carrithers  
CARRITHERS LAW OFFICE  
One Paragon Centre  
6060 Dutchman's Lane, Suite 140  
Louisville, KY 40205  
Telephone (502) 452-1233  
Reg. No. 35,475

Serial No. 10/001,903

Version with Markings to Show Changes Made

IN THE CLAIMS:

Please amend claims 1-4 as follows:

Claim 1. (Once amended) A spacer block for attaching a guard rail to a post, comprising:

[a generally rectangular block of a polymer] a pair of spaced apart opposing side walls having respective first ends and second ends;

a top panel disposed proximate said first end of said side walls;

a bottom panel disposed proximate said second end of said side walls;

said top panel said bottom panel and side walls forming a generally rectangular block having a first front face and a second rear face;

[said block including a top positioning tab for engaging the top edge of said post] an engagement mechanism operably coupled proximate said top panel, said engagement mechanism operable to engage said block with said post;

[said block including means] resting mechanism operably coupled proximate said bottom panel [extending from the face thereof for] for supporting a bottom edge of a guard rail thereon;

[said block including] at least one mounting bore extending therethrough from said first front face to said second rear face;  
and

[said block including at least one side tab for positioning said block with respect to said post] an alignment mechanism operably coupled to at least one side wall.

Claim 2. (Once amended) [A] The spacer block of claim 1 [for attaching a guard rail to a post,] comprising a thermoplastic polymer and a rubber material.

Claim 3. (Once amended) [A] The spacer block of claim 1, comprising a structural foam thermoplastic composition.

Claim 4. (Once amended) [A] The spacer block of claim 1, comprising a structural foam thermoplastic and rubber composition.

Please add new claims 5-51 as follows:

-Claim 5. (New) The spacer block of Claim 1, further comprising:

a medial wall disposed between the side walls, the medial wall positioned generally perpendicular to the side walls and generally parallel to the top and bottom panels;

the medial wall, top panel and side walls forming a first cavity; and

the medial wall, bottom panel and side walls forming second cavity.-

-Claim 6. The spacer block of Claim 5 further comprising:

at least one mounting bore traveling through the medial wall from the first face of the spacer block to the second face of the spacer block; and

the mounting bore operable to align with at least one mounting aperture on the support post.-

-Claim 7. The spacer block of Claim 5 further comprising a reinforcement structure disposed in at least one of the cavities.-

-Claim 8. The spacer block of Claim 5 further comprising a

webbing structure disposed within at least one of the cavities, the webbing structure operable to structurally reinforce the spacer block.-

-Claim 9. The spacer block of Claim 1 further comprising:  
first and second medial walls disposed generally perpendicular to the side walls and generally parallel to the top and bottom panels;

the first medial wall, side walls and top panel creating a first cavity;

the first medial wall, second medial wall and side walls forming a second cavity; and

the second medial wall, side walls and bottom panel forming a third cavity.-

-Claim 10. (New) The spacer block of Claim 9 further comprising:

at least one mounting bore disposed in the first medial wall, the mounting bore traveling between the first and second faces of the spacer block; and

at least one mounting bore disposed in the second medial wall, the mounting bore traveling between the first and second faces of the spacer block.-

-Claim 11. (New) The spacer block of Claim 1 further comprising:

the engagement mechanism including a tab operably coupled to the top panel, the tab extending beyond the second face of the spacer block.-

-Claim 12. (New) The spacer block of claim 11, further comprising:

at least two spaced apart fingers operably coupled proximate a distal end of the tab, the fingers extending from a bottom

surface of the tab and forming a gap between the fingers and the second face of the spacer block; and

the gap between the fingers operable to engage respective sides of a web on an I-beam support post and the gap between the fingers and the second face of the spacer block operable to engage respective sides of a flange on the I-beam support post.-

-Claim 13. (New) The spacer block of Claim 1 further comprising:

said resting mechanism including a tab disposed proximate the bottom panel, said tab extending from the first face of the spacer block.-

-Claim 14. (New) The spacer block of Claim 1 wherein said alignment mechanism operable coupled to at least one side wall is at least one tab projecting past said rear face for cooperatively engaging said post.-

-Claim 15. (New) The spacer block of Claim 1 further comprising the first face including a generally flat solid surface.-

-Claim 16. (New) The spacer block of Claim 1 further comprising said engagement mechanism removably engaged with said top panel.-

-Claim 17. (New) The spacer block of Claim 1 further comprising the bottom panel including a notch disposed proximate the second face of said spacer block, said notch operable to allow stacking of said spacer blocks.-

-Claim 18. (New) The spacer block of Claim 1 wherein said spacer block is formed using an injection molding process.-



-Claim 19. (New) The spacer block of Claim 1 wherein the spacer block is formed at least in part, using a structural foam.-

-Claim 20. (New) A spacer block for attaching a guard rail to a post, comprising:

- a pair of spaced apart opposing side walls having respective first ends and second ends;

- a top panel disposed proximate said first end of said side walls;

- a bottom panel disposed proximate said second end of said side walls;

- said top panel said bottom panel and side walls forming a generally rectangular block having a first front face and a second rear face;

- an engagement mechanism operably coupled proximate said top panel, said engagement mechanism operable to engage said block with said post;

- resting mechanism operably coupled proximate said bottom panel for supporting a bottom edge of a guard rail thereon;

- at least one mounting bore extending therethrough from said first front face to said second rear face;

- an alignment mechanism operably coupled to at least one side wall; and

- said spacer block comprises a structural foam composing a cellular core and an integral solid skin, wherein the transition from skin to core is gradual.-

-Claim 21. (New) The spacer block of claim 20 comprising a thermoplastic polymer and a rubber material.-

-Claim 22. The spacer block of claim 20, wherein said structural foam comprises a thermoplastic polymer and a rubber polymer.-

-Claim 23. (New) The spacer block of Claim 20, further comprising:

a medial wall disposed between the side walls, the medial wall positioned generally perpendicular to the side walls and generally parallel to the top and bottom panels;

the medial wall, top panel and side walls forming a first cavity; and

the medial wall, bottom panel and side walls forming second cavity.-

-Claim 24. (New) The spacer block of Claim 20, further comprising:

at least one mounting bore traveling through the medial wall from the first face of the spacer block to the second face of the spacer block; and

the mounting bore operable to align with at least one mounting aperture on the support post.-

-Claim 25. (New) The spacer block of Claim 23 further comprising a reinforcement structure disposed in at least one of the cavities.-

-Claim 26. (New) The spacer block of Claim 23 further comprising a webbing structure disposed within at least one of the cavities, the webbing structure operable to structurally reinforce the spacer block.-

-Claim 27. (New) The spacer block of Claim 20 further comprising:

first and second medial walls disposed generally perpendicular to the side walls and generally parallel to the top and bottom panels;

the first medial wall, side walls and top panel creating a first cavity;

the first medial wall, second medial wall and side walls forming a second cavity; and

the second medial wall, side walls and bottom panel forming a third cavity.-

-Claim 28. (New) The spacer block of Claim 9 further comprising:

at least one mounting bore disposed in the first medial wall, the mounting bore traveling between the first and second faces of the spacer block; and

at least one mounting bore disposed in the second medial wall, the mounting bore traveling between the first and second faces of the spacer block.-

-Claim 29. (New) The spacer block of Claim 20 further comprising:

the engagement mechanism including a tab operably coupled to the top panel, the tab extending beyond the second face of the spacer block.-

-Claim 30. (New) The spacer block of claim 29, further comprising:

at least two spaced apart fingers operably coupled proximate a distal end of the tab, the fingers extending from a bottom surface of the tab and forming a gap between the fingers and the second face of the spacer block; and

the gap between the fingers operable to engage respective sides of a web on an I-beam support post and the gap between the fingers and the second face of the spacer block operable to engage respective sides of a flange on the I-beam support post.-

-Claim 31. (New) The spacer block of Claim 20 further comprising:

said resting mechanism including a tab disposed proximate the

bottom panel, said tab extending from the first face of the spacer block.-

-Claim 32. (New) The spacer block of Claim 20 wherein said alignment mechanism operable coupled to at least one side wall is at least one tab projecting past said rear face for cooperatively engaging said post.-

-Claim 33. (New) The spacer block of Claim 20 further comprising the first face including a generally flat solid surface.-

-Claim 34. (New) The spacer block of Claim 20 further comprising said engagement mechanism removably engaged with said top panel.-

-Claim 35. (New) The spacer block of Claim 20 further comprising the bottom panel including a notch disposed proximate the second face of said spacer block, said notch operable to allow stacking of said spacer blocks.-

-Claim 36. (New) The spacer block of Claim 20 wherein said spacer block is formed using a structural foam injection molding process.-

-Claim 37. (New) The spacer block of Claim 20 wherein the spacer block is formed at least in part, using a structural foam.-

-Claim 38. (New) The spacer block of claim 20, wherein said skin is up to one-half inch thick.-

-Claim 39. (New) The spacer block of claim 20, wherein said skin is from one-eighth to one-half inch thick.-

-Claim 40. (New) The spacer block of claim 20, wherein said skin density is higher than the core density.-

-Claim 41. (New) The spacer block of claim 20, wherein said spacer block comprises a high skin density and a low core density without the presence of voids.-

-Claim 42. (New) The spacer block of claim 40, wherein said density between said skin and said core varies from about 30 percent in the center to 100 percent at the outer skin.-

-Claim 43. (New) The spacer block of claim 20, wherein said spacer block is processed using a low pressure injection molding machine using thermoplastics and/or rubber.-

-Claim 44. (New) The spacer block of claim 20, wherein said spacer block consists of material selected from the group consisting of virgin plastic, regrind plastic, combinations of virgin plastic and regrind plastic, combinations of virgin plastic and rubber, combinations of regrind plastic and rubber; and combinations of virgin plastic and regrind plastic and rubber.-

-Claim 45. (New) The spacer block of claim 20, wherein said spacer block comprises a polymer selected from the group consisting of polyethylene, polypropylene, polyethylene terephthalate, nylon, polyurethane, polyvinyl chloride, ABS, Acetyl, polypropylene oxide, nylon, PBT, polycarbonate, polystyrene, modified polyphenylene oxide, polyester, fiberglass filled nylon, fiberglass filled styrene, fiberglass filled SAN, acrylic, ethylene copolymers, ionomers, and polysulfone.-

-Claim 46. (New) The spacer block of claim 20, wherein said spacer block comprises up to 70 percent by weight rubber.-

-Claim 47. (New) The spacer block of claim 20, wherein said spacer block comprises from 40 to 50 weight percent rubber.-

-Claim 48. (New) The spacer block of claim 20, wherein said spacer block comprises a synthetic or natural rubber selected from the group consisting of a virgin rubber, a regrind rubber, and a combination of a virgin rubber and natural rubber.-

-Claim 49. (New) The spacer block of claim 20, wherein said spacer block includes a filler.-

-Claim 50. (New) The spacer block of claim 49, wherein said filler comprises a fiber glass material.-

-Claim 51. (New) The spacer block of claim 20, wherein said spacer block comprises up to 50 percent of a polyethylene.-